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L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1170665 CAPLUS

DOCUMENT NUMBER: 143:440257

TITLE: Preparation of indole derivatives as androgens INVENTOR(S): Van Der Louw, Jaap; Teerhuis, Neeltje Miranda;

Lommerse, Johannes Petrus Maria; Stock, Herman Thijs;

Hermkens, Pedro Harold Han

PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth. SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA									APPLICATION NO.										
WO	WO 2005102998									WO 2005-EP51766					20050421				
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,		
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,		
		NI,	NO.	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,		
		SM.	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,		
		ZM.	ZW																
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT.	BE.	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE.	ES.	FI.	FR.	GB,	GR.	HU,	IE,	IS,	IT.	LT.	LU,	MC,	NL,	PL,	PT.		
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,		
		MR,	NE.	SN.	TD,	TG													
EP					A1 20051026				EP 2004-101700					20040423					
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK		
AU	AU 2005235751						2005	1103		AU 2	005-		20050421						
						A1 20051103				CA 2005-2562571									
EP	EP 1742912			A1 20070117				EP 2005-737941						20050421					
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	HR			
CN	CN 1956954						2007	0502	CN 2005-80016406										
BR	BR 2005010078						2007	1016	BR 2005-10078						20050421				
JP	JP 2007533707						2007	1122	JP 2007-508908						20050421				
MX	MX 2006PA12201					A 20070117				MX 2006-PA12201						20061020			
US	US 20070225352					A1 20070927			US 2006-587192						20061020				
PRIORIT	RIORITY APPLN. INFO.:									EP 2	004-	1017	00		A 2	0040	423		
											004-								
										WO 2	005-	EP51	766		W 2	0050	421		
OTHER S						CASREACT 143:440257; MARPAT 143								257					

AB Indole derivs. were prepared and tested for androgenic activity. E.g., I was prepared starting from 6-nitroindole and 1-bromomethy1-3,5-difluorobenzene. The preparation of a number of indole derivs. was given and extensive androgenic activity data.

IT 868672-40-6P 868672-63-3P 868672-70-2P

868672-71-3P 868672-74-6P 868672-78-0P

868672-79-1P 868672-85-9P 868672-86-0P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. as androgens)

RN 868672-40-6 CAPLUS

CN 1H-Indol-6-amine, N-methyl-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-(CA INDEX NAME)

RN 868672-63-3 CAPLUS

CN Benzonitrile, 2-[[6-(methylamino)-1-(2-pyridinylmethyl)-1H-indol-3yl]thio]- (CA INDEX NAME)

RN 868672-70-2 CAPLUS

CN 1H-Indol-6-amine, N-methyl-3-[(2-nitrophenyl)sulfonyl]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

- RN 868672-71-3 CAPLUS
- CN 1H-Indol-6-amine, 3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

- RN 868672-74-6 CAPLUS
- CN Benzonitrile, 2-[[6-amino-1-(2-pyridinylmethyl)-1H-indol-3-yl]thio]- (CA INDEX NAME)

- RN 868672-78-0 CAPLUS
- CN 1H-Indol-6-amine, N,N-dimethyl-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

- RN 868672-79-1 CAPLUS
- CN 1H-Indol-6-amine, N-ethyl-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-(CA INDEX NAME)

- RN 868672-85-9 CAPLUS
- CN Acetonitrile, 2-[[3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-1H-indol-6yl]amino]- (CA INDEX NAME)

- RN 868672-86-0 CAPLUS
- CN 1H-Indol-6-amine, N-(2-methoxyethyl)-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

- IT 868672-98-4P 868673-07-8P 868673-08-9P 868673-34-1P 868673-35-2P 868673-36-3P 868673-37-4P 868673-39-6P 868673-35-5-7P RI: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
  - (preparation of indole derivs. as androgens)
- RN 868672-98-4 CAPLUS
- CN 1H-Indol-6-amine, N-methyl-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-, hydrochloride (1:?) (CA INDEX NAME)

x HC1

- RN 868673-07-8 CAPLUS
- CN Carbamic acid, [3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-1H-indol-6yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 868673-08-9 CAPLUS
- CN Carbamic acid, methyl[3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-1Hindol-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 868673-34-1 CAPLUS
- CN Benzoic acid, 2-[[6-[[(1,1-dimethylethoxy)carbonyl]amino]-1-(2-pyridinylmethyl)-1H-indo1-3-yl]thio]-, methyl ester (CA INDEX NAME)

RN 868673-35-2 CAPLUS

CN Benzoic acid, 2-[[6-[[(1,1-dimethylethoxy)carbonyl]amino]-1-(2-pyridinylmethyl)-1H-indol-3-yl]thio]- (CA INDEX NAME)

RN 868673-36-3 CAPLUS

CN Carbamic acid, [3-[[2-(aminocarbonyl)phenyl]thio]-1-(2-pyridinylmethyl)-1H-indol-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 868673-37-4 CAPLUS

 ${\tt CN-Carbamic\ acid,\ [3-[(2-cyanophenyl)thio]-1-(2-pyridinylmethyl)-1H-indol-6-ndo$ 

## v1]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 868673-39-6 CAPLUS
- CN Carbamic acid, [3-[(2-cyanophenyl)thio]-1-(2-pyridinylmethyl)-1H-indol-6vl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 868673-56-7 CAPLUS
- CN Carbamic acid, [3-[(2-bromophenyl)thio]-1-(2-pyridinylmethyl)-1H-indol-6yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- REFERENCE COUNT:
- THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
- T. 4 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:
- ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN 2004:412918 CAPLUS 140:423584
  - A preparation of indole derivatives useful in the treatment of androgen-receptor related diseases

INVENTOR(S): Hermkens, Pedro Harold Han; Stock, Herman Thijs;

Teerhuis, Neeltje Miranda; Lommerse, Johannes Petrus Maria; Van der Louw, Jaap

PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.													D					
							WO 2003-EP50783					20031103							
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,		
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,		
											VC,								
	RW	: BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,		
											BG,								
											MC,								
											GQ,							TG	
CI	1 250	1907			A1		2004	0521		CA 2	003-	2504		20031103					
										AU 2003-301853									
BI	200	30160	20		A	A 20050920			BR 2003-16020 EP 2003-810458						20031103				
E										EP 2003-810458 GB, GR, IT, LI, LU,									
	R:																PT,		
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
Cl	CN 1714078				A		2005	1228	CN 2003-80103950 JP 2004-549180					20031103					
JE	JP 2006507293				Т		2006	0302	JP 2004-549180					20031103					
NC	NO 2005002012				A		2005	0526	NO 2005-2012 ZA 2005-3559					20050425					
	IN 2005CN00826																		
									MX 2005-PA4929										
US	US 20060128722				AI	20060615			US 2005-534945 LV 2005-68					20050506					
	LV 13359					20060320													
PRIORIT	RIORITY APPLN. INFO.:									EF Z	2002-79648 2002-424579P				A 20021107				
										US 2	002-	4245	191		2				
										WO 2	003-	EP50	183		N 2	0031	TUJ		

$$\mathbb{R}^3$$
  $\mathbb{R}^2$   $\mathbb{N}^2$   $\mathbb{R}^3$   $\mathbb{R}^2$   $\mathbb{R}^3$   $\mathbb$ 

OTHER SOURCE(S):

GI

II

MARPAT 140:423584

- AR The invention relates to a preparation of indole derivs. of formula I [wherein: X = S, S(O), SO2; R1 is (un)substituted 5- or 6-membered monocyclic, (hetero/homo)cyclic ring; R2 is 2-02NC6H4, 2-cyanophenyl, 2-hydroxymethylphenyl, pyridin-2-yl, pyridin-2-yl-N-oxide, etc.; R3 is H, halogen or C1-4alkyl; R4 is H, OH, C1-4alkoxy, or halogen; R5 is H, OH, C1-4alkoxv, NH2, CN, halogen, C1-4fluoroalkvl, or NO2, etc.], useful for the treatment of androgen-receptor related diseases. Anti-androgenic activity of the invented compds. was determined in an in vitro bioassay of Chinese hamster ovary (CHO) cells stably transfected with the human androgen receptor expression plasmid and a reporter plasmid in which the MMTV-promoter was linked to the luciferase reporter gene. For instance, indole derivs. II (EC50 < 5 nM; efficacy > 0.8) was prepared via N-benzylation of 6-methoxyindole by 3,5-difluorobenzyl bromide, and subsequent addition of the obtained 1-(3,5-difluorobenzyl)-6-methoxy-1Hindole to 2-nitrobenzenesulfenyl chloride (example 1). 691400-54-1P 691400-55-2P
- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of indole derivs. useful in the treatment of androgen-receptor related diseases)

RN 691400-54-1 CAPLUS

CN 1H-Indole-6-carboxylic acid, 3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-, methyl ester (CA INDEX NAME)

RN 691400-55-2 CAPLUS

CN 1H-Indole-6-carboxylic acid, 3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-(CA INDEX NAME)

II 691399-74-3P 691400-66-5P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of indole derivs. useful in the treatment of androgen-receptor
 related diseases)

RN 691399-74-3 CAPLUS

CN 1H-Indole, 6-methoxy-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

RN 691400-66-5 CAPLUS

CN 1H-Indole-6-carbonitrile, 3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-(CA INDEX NAME)

IT 691400-22-3P 691400-35-8P 691400-37-0P

691400-38-1P 691400-52-9P 691400-56-3P

691400-57-4P 691400-73-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. useful in the treatment of androgen-receptor related diseases)

RN 691400-22-3 CAPLUS

CN 1H-Indole, 6-methoxy-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 691400-35-8 CAPLUS
CN Acetamide, 2-fluoro-N-[3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-1Hindol-6-yl]- (CA INDEX NAME)

RN 691400-38-1 CAPLUS
CN Propanamide, N-[3-[(2-nitropheny1)thio]-1-(2-pyridinylmethy1)-1H-indol-6-y1]- (CA INDEX NAME)

RN 691400-52-9 CAPLUS
CN 1H-Indole-6-carboxamide, N,N-dimethyl-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

RN 691400-56-3 CAPLUS

CN 1H-Indole-6-carboxamide, N-methyl-3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)- (CA INDEX NAME)

RN 691400-57-4 CAPLUS

CN 1H-Indole-6-carboxamide, 3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-(CA INDEX NAME)

RN 691400-73-4 CAPLUS
CN 1H-Indole-6-carbonitrile, 3-[(2-nitrophenyl)thio]-1-(2-pyridinylmethyl)-,
hydrochloride (1:1) (CA INDEX NAME)

● HCl

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